

NATIONAL PHOTOGRAPHIC INTERPRETATION CENTER



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basic imagery interpretation report

Komsomolsk Shipyard Amur 199 (Shipyard Activities, [redacted])

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STRATEGIC WEAPONS INDUSTRIAL FACILITIES

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INSTALLATION OR ACTIVITY NAME				COUNTRY	
Komsomolsk Shipyard Amur 199 (Shipyard Activities, [REDACTED])				UR	
UTM COORDINATES	GEOGRAPHIC COORDINATES	CATEGORY	BE NO.	COMIREX NO.	NIETB NO.
NA	50-32-32N 137-02-08E				

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MAP REFERENCE

SAC. USATC, Series 200, Sheet 0204-8, scale 1:200,000

LATEST IMAGERY USED

NEGATION DATE (if required)

NA

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ABSTRACT

1. (TSR) This report describes significant activity observed at Komsomolsk Shipyard Amur 199, USSR, from [REDACTED]. It updates a previous NPIC report. All usable KEYHOLE imagery covering the shipyard during this period was used in the preparation of this report.

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2. (TSR) Significant events that have occurred since the previous report include the launchings of two V-III nuclear-powered attack submarines (SSNs) and one India-class auxiliary submarine (SSAG). Also, probable submarine reactor vault components were first identified.

3. (TSR) The modified V-II SSNs referred to in the previous activity report have been designated V-III SSNs. A [REDACTED] teardrop-shaped pod atop the upper rudder on the lengthened V-II hull is the identifying feature for the V-III designation. The V-II (possibly modified) reported as being launched at Leningrad between [REDACTED] did not receive the teardrop-shaped pod and is assessed as being V-II SSN unit seven. The waterline length of the V-III is approximately 102 meters as compared with the approximate 94-meter waterline length of the V-II. The V-III length includes the teardrop-shaped pod.

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4. (U) This report contains 13 annotated photographs and three tables.

BASIC DESCRIPTION

5. (TSR) Figure 1 is an overall view of the geographic confines of Komsomolsk Shipyard Amur 199. Tables 1 and 2 present revised production information on V-II and V-III SSNs through 1979. Reporting positions and functional areas are appropriately annotated. This report updates a previous NPIC report.¹

SSBN Production

6. (TSR) No evidence of nuclear-powered ballistic missile submarine (SSBN) production was seen at Komsomolsk shipyard during the reporting period.

V-III Production

7. (TSR) As during the previous reporting period, two V-III SSNs were launched, partially fitted-out, and transferred to Petrovka Naval Base and Shipyard [REDACTED] for final fitting-out during the reporting period. Initial launch preparations for the third V-III SSN at Komsomolsk were observed on [REDACTED] when the ends of the launch rails in front of buildingway 3 were separated in preparation for positioning of the transporter dock—ARD(T). The launch support device (LSD) on which the bow of the transporter dock rests during launching was in place and aligned with launch rail 3. On [REDACTED] the ARD(T) was observed along the southside of the fitting-out pier at reporting position (RP) 14 with a typical V-III sub-keel block arrangement. This pattern was a rearrangement of the pattern used for the India auxiliary submarine (SSAG) launched just one or two weeks earlier from buildingway 2. By [REDACTED] the launch basin was flooded and the ARD(T) was aligned with buildingway 3. Between [REDACTED] the V-III SSN was launched and placed under the panel tunnel. The SSN remained under the panel tunnel through [REDACTED] the SSN was observed in the transporter dock with canvas draped over the sail and the stern pod (Figure 2). The Yurka-class minesweeper (MSF) seen in the Amur River just outside the shipyard on [REDACTED] was probably used to escort or tow the ARD(T) and V-III SSN to the mouth of the Amur River at Nikolayevsk. From Nikolayevsk the submarine completed its transit to Petrovka, probably under its own power, and arrived by [REDACTED].

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8. (TSR) By [REDACTED] the ARD(T) had been returned to the shipyard and was aligned with launch rail 5. This was actually the second indication of an impending submarine launch. The first

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Table 1.
Production of V-II SSN

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Unit Number	Launch Date	Construction Site
1		Gorkiy
2		Gorkiy
3		Leningrad
4		Gorkiy
5		Leningrad
6		Gorkiy
7		Leningrad

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Table 2.
Production of V-III SSN

This table in its entirety is classified TOP SECRET RUFF

Unit Number	Launch Date	Construction Site
1		Leningrad
2		Komsomolsk (way 5)
3		Komsomolsk (way 4)
4		Komsomolsk (way 3)
5		Leningrad
6		Komsomolsk (way 5)

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indication of the third submarine launch during 1979 occurred on [] when the ends of the launch rails were observed separated. Cloud cover over part of the launch basin precluded observation of the LSD; however, it may have been aligned with launch rail 5 on [] the fourth Komsomolsk-built V-III SSN had been launched and placed under the panel tunnel. Floating screens were placed outboard of the panel tunnel apparently to restrict visibility of the newly launched submarine from the shoreline. The ARD(T) was on the north side of RP 14 on this date. The V-III launch dolly pattern remained in the ARD(T) through [] the dock had moved to the south side of RP 14. The cranes on the pier were utilized to replace the launch dollies with keel blocks. On [] two indications were seen of the impending transfer of the V-III up the Amur River: 1) the transporter dock with the V-III keel block arrangement had moved back to the north side of the fitting-out pier in preparation for positioning of the submarine; and 2) a Yurka MSF was again observed anchored in the Amur River near the shipyard. A Yelva-class diving tender (YDT) and a tug had joined the MSF by the next day for towing/escort duties. By [] all of these units had departed the area, thus completing the third submarine launch cycle of the season for this Pacific Fleet shipyard. The V-III arrived at Petrovka for its final fitting-out by early November. Between [] the ARD(T) had returned to the shipyard. On [] the LSD was observed in the ARD(T) along the south side of the fitting-out pier. The basin and immediate area of the Amur River were frozen in for the winter.

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India-Class SSAG Production

9. (TSR) Two India-class SSAG well-deck sections (Figure 3) remained in open storage in area A of the shipyard through [] Section A was [] outside and [] inside. Section B was [] outside and [] inside. Both sections were no longer observed on [] The launch of the second India SSAG occurred at Komsomolsk between [] [] The first and second SSAGs are identically configured; however, there are some subtle dimensional differences (Table 3), the most notable being the length of the submersible wells.

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10. (TSR) On [] the end of the rails at launchway 2 were separated indicating initial launch preparations. By [] the ARD(T) was aligned with rail 2 and the launch basin was flooded. On [] the SSAG was seen along the north side of RP 14 with floating screens outboard (Figure 4). By [] the keel block pattern in the transporter dock was identical to that seen for the first India SSAG. By [] the dock and SSAG had departed the base. The SSAG arrived at Petrovka for final fitting-out by []

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Submarine Probable Reactor Vault Components

11. (TSR) Two submarine probable reactor vault base sections were identified at Komsomolsk during this reporting period.² The two submarine probable reactor vault base sections were first observed on [] on the rail line leading into the shop building behind the four-bay construction hall (Figure 5). 25X1
The sections were next seen on [] on the rail spur behind the four-bay construction hall (Figure 6) 25X1
and remained there through [] neither of the components was seen; 25X1
however, it could not be determined whether they had been moved into the two- or the four-bay construction hall. Snow clearing from the rail lines in addition to the moving of railcars from both lines indicated that the components could have been moved to either construction hall. The outside centerline measurements of the components are [] 25X1
12. (TSR) In addition to these two probable reactor vault base sections, a third, differently configured component, a side section (Figure 7) was identified as being associated with the submarine probable reactor vault base sections.³ The curvature of the structural framework of this open-ended component is similar to that of submarine outer hull plates seen at the shipyard; however, the framework appeared to be similar to that of the two originally identified probable vault base sections. This side section was observed on the rail line leading into the four-bay construction hall on [] the component 25X1
had been moved to the rail spur behind the four-bay construction hall where it remained through the end of the reporting period. The outside width of the side section is [] while the inside is [] 25X1
across. The length of the structural framework is [] 25X1

Other Submarine-Related Components

13. (TSR) Throughout the reporting period, numerous outer hull plates, jigs, curved plates, and submarine assemblies were observed in the open storage areas and on the rail lines leading into the fabrication buildings and construction halls. As during the previous reporting period, pressure hull sections were seen with platform covers placed over them. V-class SSN bow outer hull sections were observed on [] (Figure 8) and on [] (Figure 9). The latter was [] and the 25X1
rectangular cutout was [] Another possible V-class SSN-related component was observed 25X1
on the railspur behind the four-bay construction hall (Figures 5 and 6). This component was [] 25X1
meters overall with a [] cutout on one end. 25X1
14. (TSR) A relatively small five-hole plate was observed on [] (Figure 10) on the rail line behind 25X1
the heavy fabrication building. The plate was [] and the holes were [] in diameter. 25X1
15. (TSR) Between [] two probable reactor plates were observed at the 25X1
shipyard, one in area G (Figure 11) and one in area H (Figure 12). The plates were [] 25X1
wide, and [] high. The center hole was [] in diameter and the four outside holes were [] 25X1
meters in diameter. The lengthwise center-to-center measurement of the outside holes was [] while the 25X1
widthwise center-to-center measurement was [] 25X1

Imagery Analyst's Comments

16. (TSR) The probable reactor plates may have been used for the V-III SSN program at Komsomolsk. Their exact location within the shipyard has not changed since at least [] which may 25X1
indicate a slowdown or probably an end to the Victor program at Komsomolsk. This, combined with the reactor vault components which are not associated with any known construction program, may indicate a shift in shipyard emphasis to a possible new submarine construction program.

Table 3.
Dimensional Comparison of India-Class SSAGs

This table in its entirety is classified TOP SECRET RUFF

Dimension	Unit 1	Unit 2
Waterline length without submersibles		
Beam		
Superstructure length		
Superstructure width		
Forward well length		
Forward well width		
Aft well length		
Aft well width		

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Top Secret RUFF**Construction Activity**

17. (TSR) Between [] removal of the rails in front of buildingway 1 commenced. By [] most of the rails had been removed, and by [] all of the rail sections had been displaced (Figure 13). Grading activity continued through the end of the reporting period. The purpose of this activity may be to reinforce the area in order to install heavier rails as seen at launch rails 2 through 6.

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25X1**REFERENCES****IMAGERY**

(TSR) All usable KEYHOLE imagery acquired between []
[] was used in the preparation of this report.

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25X1**MAPS OR CHARTS**

SAC. US Air Target Chart, Series 200, Sheet 0204-8, scale 1:200,000 (UNCLASSIFIED)

DOCUMENT

1. NPIC. [] RCA-09/0004/79, *Komsomolsk Amur 199 (Shipyard Activities. []*
1978) (TSR), Feb 79 (TOP SECRET [] 25X1
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2. NPIC. [] IAR-A087/79, *First Identification of Submarine Probable Reactor Vault Components, USSR (TSR), Nov 79 (TOP SECRET []* 25X1
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3. NPIC. [] IAR-0045/80, *Vault Components for New Generation Submarine Reactors (TSR), Apr 80*
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REQUIREMENT

COMIREX J01
Project 200022DJ

(S) Comments and queries regarding this report are welcome. They may be directed to []
Soviet Strategic Forces Division, Imagery Exploitation Group, NPIC [] 25X1
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